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**EUROPEAN PATENT APPLICATION**

21 Application number: 84307300.8

51 Int. Cl.<sup>4</sup>: **G 01 N 33/53**

**G 01 N 33/543, G 01 N 33/542**

22 Date of filing: 24.10.84

30 Priority: 25.10.83 GB 8328520

43 Date of publication of application:  
22.05.85 Bulletin 85/21

64 Designated Contracting States:  
AT BE CH DE FR GB IT LI NL SE

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54 **Methods of assay.**

57 An electrochemical specific-binding assay of a ligand wherein one of the components is redox-modified by having incorporated into its molecular structure a redox centre, and which includes the step of determining the extent to which an electrochemical characteristic of the components is perturbed by complex formation and/or by controlled external influences.

Redox centres are molecules, atoms, groups, ions, radicals etc capable of undergoing reduction and oxidation. A preferred example is ferrocene or its derivatives.

The electrochemical apparatus will typically contain a working electrode, which is preferably solid. Components may advantageously be immobilised onto such a solid working electrode.

When controlled external influences are employed, these may comprise displacement of non-immobilised electroactive components relative to the working electrode.

The method is particularly applicable to the assay of antigens, haptens and antibodies.

The use of redox centres avoids radioactive labels and provides a simple, rapid, sensitive and specific assay method.

**EP 0 142 301 A2**